



PYROELECTRIC SENSOR SIGNAL CONVERSION CIRCUIT

ABSTRACT OF THE DISCLOSURE

A pyroelectric sensor signal conversion circuit is proposed. The conversion circuit comprises a gain control circuit, a zero crossing detection circuit, a first time delay circuit, a second time delay circuit, a sampling and hold circuit, and a zero and span adjustment circuit. The gain control circuit amplifies an output signal of the pyroelectric sensor. The zero crossing detection circuit detects a zero crossing of the signal. The first time delay circuit detects a peak value of the signal, while the second time delay circuit determines a sampling time for the sampling and hold circuit. The sampling and hold circuit reads the peak value of the signal and maintains the peak value until sampling in the next cycle. And the zero and span adjustment circuit adjusts the output signal to within a desired voltage range.